(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 7 July 2005 (07.07.2005)

PCT

(10) International Publication Number WO 2005/061892 A1

(51) International Patent Classification7:

F04B 39/00

(21) International Application Number:

PCT/BR2004/000250

(22) International Filing Date:

21 December 2004 (21.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: PI0306180-9

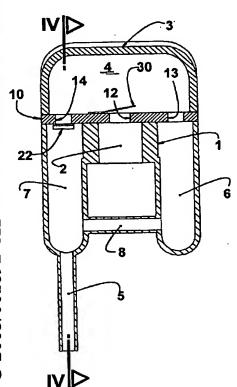
23 December 2003 (23.12.2003) BR

(71) Applicant (for all designated States except US): EM-PRESA BRASILEIRA DE COMPRESSORES S.A. -EMBRACO [BR/BR]; Rua Rui Barbosa, 1020, 89219-901 Joinville - SC (BR).

- (72) Inventor; and
- (75) Inventor/Applicant (for US only): FAGOTTI, Fablan [BR/BR]; Rua Barriga Verde, 539, 89222-360 Joinville -SC (BR).
- (74) Agents: ARNAUD, Antonio M.P. et al.; Rua José Bonifácio, 93 9th floor, 01003-901 São Paulo SP (BR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: DISCHARGE SYSTEM FOR COMPRESSORS



(57) Abstract: A discharge system for compressors of the type which comprises: a cylinder block defining a compression chamber (2); a first discharge chamber (4); a second discharge chamber (6) in direct communication with the first discharge chamber (4); a third discharge chamber (7) in constant fluid communication with the second discharge chamber (6) and opened to a discharge tube (5), said discharge system comprising a valve means (22) which assumes an open position, communicating the first and the third discharge chambers (4,7) when a gas mass flow passing from the compression chamber (2) to the first discharge chamber (4) reaches a determined gas mass flow value, and a closed position blocking, at least in most part, said fluid communication between the first and third discharge chambers (4,7) when said gas mass flow reaches values that are lower than the determined gas mass flow value.